



## DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center – WO66-G609  
Silver Spring, MD 20993-0002

October 27, 2014

PHADIA US, INC  
MR. MARTIN ROBERT MANN  
REGULATORY AFFAIRS MANAGER  
4169 COMMERCIAL AVE.  
PORTAGE, MI 49002

Re: K140225

Trade/Device Name: EliA™ PR<sup>3</sup>S Immunoassay  
EliA™ MPO<sup>S</sup> Immunoassay  
EliA™ GBM Immunoassay  
EliA™ ANCA/GBM Positive Control 100  
EliA™ ANCA/GBM Positive Control 250

Regulation Number: 21 CFR 866.5660

Regulation Name: Multiple autoantibodies immunological test system

Regulatory Class: Class II

Product Code: MOB, MVJ, JJY

Dated: September 19, 2014

Received: September 24, 2014

Dear Mr. Mann:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA).

You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must

comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

Maria M. Chan -S

  
Maria M. Chan, Ph.D.  
Director  
Division of Immunology and Hematology Devices  
Office of In Vitro Diagnostics and  
Radiological Health  
Center for Devices and Radiological Health

Enclosure

**Indications for Use**510(k) Number (*if known*)

K140225

## Device Name

EliA(TM) PR3s, EliA(TM) MPOs, EliA(TM) GBM, EliA(TM) ANCA/GBM Positive Control 100, EliA ANCA/GBM Positive Control 250

Indications for Use (*Describe*)

EliA PR3s is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to proteinase 3 (PR3) in human serum and plasma (heparin, EDTA, citrate) to aid in the clinical diagnosis of Granulomatosis with Polyangiitis (GPA; formerly known as Wegener's granulomatosis) in conjunction with other laboratory and clinical findings. EliA PR3s uses the EliA IgG method on the instrument Phadia 100.

EliA PR3s is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to proteinase 3 (PR3) in human serum and plasma (heparin, EDTA, citrate) to aid in the clinical diagnosis of Granulomatosis with Polyangiitis (GPA; formerly known as Wegener's granulomatosis) in conjunction with other laboratory and clinical findings. EliA PR3s uses the EliA IgG method on the instrument Phadia 250.

EliA MPOs is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to myeloperoxidase (MPO) in human serum and plasma (heparin, EDTA, citrate) as an aid in the clinical diagnosis of microscopic polyangiitis (MPA) in conjunction with other laboratory and clinical findings. EliA MPOs uses the EliA IgG method on the instrument Phadia 100.

EliA MPOs is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to myeloperoxidase (MPO) in human serum and plasma (heparin, EDTA, citrate) as an aid in the clinical diagnosis of microscopic polyangiitis (MPA) in conjunction with other laboratory and clinical findings. EliA MPOs uses the EliA IgG method on the instrument Phadia 250.

EliA GBM is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to alpha3 chain of collagen IV in human serum and plasma (heparin, EDTA, citrate) as an aid in the clinical diagnosis of Goodpasture syndrome in conjunction with other laboratory and clinical findings. EliA GBM uses the EliA IgG method on the instrument Phadia 100.

EliA GBM is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to alpha3 chain of collagen IV in human serum and plasma (heparin, EDTA, citrate) as an aid in the clinical diagnosis of Goodpasture syndrome in conjunction with other laboratory and clinical findings. EliA GBM uses the EliA IgG method on the instrument Phadia 250.

EliA ANCA/GBM Positive Control 100 is intended for laboratory use in monitoring the performance of in vitro measurement of ANCA/GBM antibodies with Phadia 100 using the EliA IgG method.

EliA ANCA/GBM Positive Control 250 is intended for laboratory use in monitoring the performance of in vitro measurement of ANCA/GBM antibodies with Phadia 250 using the EliA IgG method.

Type of Use (*Select one or both, as applicable*) Prescription Use (Part 21 CFR 801 Subpart D) Over-The-Counter Use (21 CFR 801 Subpart C)**CONTINUE ON A SEPARATE PAGE IF NEEDED.**

---

This section applies only to requirements of the Paperwork Reduction Act of 1995.

**\*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\***

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services  
Food and Drug Administration  
Office of Chief Information Officer  
Paperwork Reduction Act (PRA) Staff  
*PRASStaff@fda.hhs.gov*

*"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."*

## **510(k) Summary of Safety and Effectiveness**

This summary of safety and effectiveness information is being submitted in accordance with the requirements of The Safety Medical Devices Act of 1990 (SMDA 1990) and 21 CFR Part 807.92.

**Assigned 510(k) Number:** **K140225**

**Date of Summary Preparation:** October 24, 2014

**Manufacturer:** Phadia AB  
Rapsgatan 7P  
P.O. Box 6460  
SE-751 37 Uppsala, Sweden

**510 (k) Contact Person:** Martin Mann  
Senior Regulatory Affairs Manager  
Phadia US Inc.  
4169 Commercial Avenue  
Portage, MI 49002, USA  
+1 (-269-492) -1957 (Phone)  
+1 (-269-492) -7541 (Fax)  
[martin.mann@thermofisher.com](mailto:martin.mann@thermofisher.com)

**Device Name:** EliA™ PR3<sup>S</sup> Immunoassay  
EliA™ MPO<sup>S</sup> Immunoassay  
EliA™ GBM Immunoassay  
EliA™ ANCA/GBM Positive Control 100  
EliA™ ANCA/GBM Positive Control 250

**Common Name:** Test system, antineutrophil cytoplasmic antibodies (ANCA)  
Devices, antibodies to glomerular basement membrane (GBM)

### **Classification**

<b><u>Product Name</u></b>	<b><u>Product Code</u></b>	<b><u>Class</u></b>	<b><u>CFR</u></b>
EliA™ PR3 <sup>S</sup>	MOB	II	866.5660
EliA™ MPO <sup>S</sup>	MOB	II	866.5660
EliA™ GBM	MVJ	II	866.5660
EliA™ ANCA/GBM Positive Control	JJY	I	862.1660

## **Predicate Devices:**

Quanta Lite PR-3 Elisa, INOVA	K981328
Quanta Lite MPO IgG Elisa, INOVA	K981330
Wielisa GBM, Wieslab AB	K974169

## **Intended Use Statements of the New Devices**

- 1) EliA PR3<sup>S</sup> is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to proteinase 3 (PR3) in human serum and plasma (heparin, EDTA, citrate) to aid in the clinical diagnosis of Granulomatosis with Polyangiitis (GPA; formerly known as Wegener's granulomatosis) in conjunction with other laboratory and clinical findings. EliA PR3<sup>S</sup> uses the EliA IgG method on the instruments Phadia 100 and Phadia 250.
- 2) EliA MPO<sup>S</sup> is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to myeloperoxidase (MPO) in human serum and plasma (heparin, EDTA, citrate) as an aid in the clinical diagnosis of microscopic polyangiitis (MPA) in conjunction with other laboratory and clinical findings. EliA MPO<sup>S</sup> uses the EliA IgG method on the instruments Phadia 100 and Phadia 250.
- 3) EliA GBM is intended for the in vitro semi-quantitative measurement of IgG antibodies directed to  $\alpha$ 3 chain of collagen IV in human serum and plasma (heparin, EDTA, citrate) as an aid in the clinical diagnosis of Goodpasture syndrome in conjunction with other laboratory and clinical findings. EliA GBM uses the EliA IgG method on the instruments Phadia 100 and Phadia 250.
- 4) EliA ANCA/GBM Positive Control 100 is intended for laboratory use in monitoring the performance of in vitro measurement of ANCA/GBM antibodies with Phadia 100 using the EliA IgG method.
- 5) EliA ANCA/GBM Positive Control 250 is intended for laboratory use in monitoring the performance of in vitro measurement of ANCA/GBM antibodies with Phadia 250 using the EliA IgG method.

### Special condition for use statement

The device is for prescription use only.

### Special instrument requirements

Phadia® 100/Phadia® 250 are fully automated immunoassay analyzers, which include software for evaluation of test results.

## **General Description of the New Devices**

The new devices belong to a fully integrated and automated system for immunodiagnostic testing. It comprises a Fluorescence-Immunoassay test system using EliA single wells as the solid phase and is intended to be performed on the instruments Phadia 100 and Phadia 250.

The conjugate for the EliA IgG method is mouse anti-human IgG beta-galactosidase, which uses 4-Methylumbelliferyl- $\beta$ -D-Galactoside as substrate.

The total IgG calibration is based on a set of six WHO-standardized IgG Calibrators derived from human serum. They are used to establish an initial calibration curve, which may be used for up to 28 days on additional assays and can be stored by the instrument. Each additional assay includes calibrator (curve) controls that have to recover in defined ranges to ensure that the stored calibration curve is still valid. The Fluorescence-Immunoassay test system includes test-, method-specific and general reagents that are packaged as separate units.

## **Test Principle of the New Devices**

The EliA Wells are coated with the following antigens:

<b>Test</b>	<b>Antigen coated to the wells:</b>
EliA PR3 <sup>s</sup>	Human PR3 protein
EliA MPO <sup>s</sup>	Human MPO protein
EliA GBM	Human recombinant $\alpha$ 3 chain of collagen IV

If present in the patient's specimen, antibodies to these proteins bind to their specific antigen. After washing away non-bound antibodies, enzyme-labeled antibodies against human IgG antibodies (EliA IgG Conjugate) are added to form an antibody-conjugate complex. After incubation, non-bound conjugate is washed away and the bound complex is incubated with a Development Solution. After stopping the reaction, the fluorescence in the reaction mixture is measured. The higher the response value, the more specific IgG is present in the specimen. To evaluate test results, the response for patient samples is compared directly to the response for calibrators.

## **Device Comparison**

The new and the predicate devices both represent non-competitive solid phase ELISAs. The IVDs are used as an aid in the diagnosis of the following diseases:

<b>Disease</b>	<b>Detection of antibodies to</b>
Granulomatosis with Polyangiitis (GPA; formerly known as Wegener's granulomatosis)	PR3
Microscopic polyangiitis (MPA)	MPO
Goodpasture syndrome	GBM

## **Laboratory equivalence**

The comparability of the predicate devices and new devices is supported by a data set including

- **results obtained within a comparison study between new and predicate device**
- **results obtained for clinically defined sera**
- **results obtained for samples from apparently healthy subjects (normal population).**

In summary, all available data support that the new devices are substantially equivalent to the predicate devices.